ally drives the fan shaft **92** with the rotating ring gear **90** through the grounded star gears **88**.

[0033] The low pressure compressor **44** includes multiple compressor stages arranged between the inlet and intermediate case flowpaths **63**, **65**, for example, first and second compressor stages **98**, **100**, that are secured to the hub **74** by a rotor **96**. The first bearing **70** is axially aligned with one of the first and second compressor stages **98**, **100**. In one example, a variable stator vane array **102** is arranged upstream from the first and second compressor stages **98**, **100**. Struts **104** are arranged upstream from the variable stator vane array **102**. An array of fixed stator vanes **106** may be provided axially between the first and second compressor stages **98**, **100**. Although a particular configuration of low pressure compressor **44** is illustrated, it should be understood that other configurations may be used and still fall within the scope of this disclosure.

[0034] The inlet case **62** includes inlet case portions **108**, and bearing support **110**, which are removably secured to one another. The bearing support portion **110** and torque frame **94** are secured to the inlet case portion **108** at a joint **109**. The bearing support portion **110** supports a second bearing **112**, which is a rolling bearing in one example. The second bearing **112** is retained on the hub **74** by a nut **113**, for example, and is arranged radially outward from the flex shaft **76** and radially between the torque frame **94** and flex shaft **76**. In the example, the second bearing **112** is axially aligned with and radially inward of the variable stator vane array **102**. The geared architecture **48** and the second bearing **112** are arranged in a lubrication compartment **114**, which is separate from the bearing compartment **71** in the example.

[0035] FIG. **3** shows an embodiment **200**, wherein there is a fan drive turbine **208** driving a shaft **206** to in turn drive a fan rotor **202**. A gear reduction **204** may be positioned between the fan drive turbine **208** and the fan rotor **202**. This gear reduction **204** may be structured and operate like the gear reduction disclosed above. A compressor rotor **210** is driven by an intermediate pressure turbine **212**, and a second stage compressor rotor **214** is driven by a turbine rotor **216**. A combustion section **218** is positioned intermediate the compressor rotor **214** and the turbine section **216**.

[0036] FIG. **4** shows yet another embodiment **300** wherein a fan rotor **302** and a first stage compressor **304** rotate at a common speed. The gear reduction **306** (which may be structured as disclosed above) is intermediate the compressor rotor **304** and a shaft **308** which is driven by a low pressure turbine section.

[0037] Although an example embodiment has been disclosed, a worker of ordinary skill in this art would recognize that certain modifications would come within the scope of the claims. For that reason, the following claims should be studied to determine their true scope and content.

What is claimed is:

1. A gas turbine engine comprising:

a core housing including an inlet case and an intermediate case that respectively provide an inlet case flow path and an intermediate case flow path;

a shaft supporting a compressor section that is arranged axially between the inlet case flow path and the intermediate case flow path,

a geared architecture coupled to the shaft, and a fan coupled to and rotationally driven by the geared architecture, wherein the geared architecture includes a sun gear supported on the shaft;

a first bearing supporting the shaft relative to the intermediate case; and

a second bearing supporting the shaft relative to the inlet case, and the second bearing is arranged radially outward from the shaft.

2. The gas turbine engine according to claim **1**, wherein the shaft includes a hub secured to the main shaft, and the compressor section includes a rotor mounted to the hub, the hub supporting the second bearing.

3. The gas turbine engine according to claim **2**, wherein the inlet case includes an inlet case portion defining the inlet case flow path, and a bearing support portion removably secured to the inlet case portion, the second bearing mounted to the bearing support portion.

4. The gas turbine engine according to claim **1**, wherein the inlet case includes a first inlet case portion defining the inlet case flow path, and a bearing support portion removably secured to the inlet case portion, the second bearing mounted to the bearing support portion.

5. The gas turbine engine according to claim **1**, wherein the intermediate case includes an intermediate case portion defining the intermediate case flow path, and a bearing support portion removably secured to the intermediate case portion, the first bearing mounted to the bearing support portion.

6. The gas turbine engine according to claim **1**, wherein the first bearing is a ball bearing and the second bearing is a roller bearing.

7. The gas turbine engine according to claim **1**, wherein the first and second bearings are arranged in separate sealed lubrication compartments.

8. The gas turbine engine according to claim **1**, comprising a lubrication compartment, the second bearing and the geared architecture arranged in the lubrication compartment.

9. The gas turbine engine according to claim **1**, wherein said low pressure turbine is one of three turbine rotors, and said low pressure turbine driving said fan, while the other two of said turbine rotors each driving a compressor section

10. The gas turbine engine according to claim **1**, wherein also including a high pressure turbine, with each of said low pressure turbine and said high pressure turbine driving a compressor rotor.

11. The gas turbine engine according to claim **10**, wherein said gear train is positioned intermediate a compressor rotor driven by said low pressure turbine and said fan.

12. The gas turbine engine according to claim **10**, wherein said gear train is positioned intermediate said low pressure turbine and said compressor rotor driven by said low pressure turbine.

13. A gas turbine engine comprising:

a core housing providing a core flow path;

a fan;

a shaft supporting a compressor section arranged within the core flow path, wherein the compressor section is fluidly connected to the fan, the compressor section comprising a first pressure compressor and a second pressure compressor upstream from the first pressure compressor, the second pressure compressor including multiple compressor stages; and

first and second bearings supporting the shaft relative to the core housing and are arranged radially inward of and axially overlapping with at least some of the multiple compressor stages; and